

Mobile robotic system with web server and digital radio links

Abstract

The invention is a computerized mobile robot with an onboard internet web server, and a capability of establishing a first connection to a remote web browser on the internet for robotic control purposes, and a capability of establishing a second short range bi-directional digital radio connection to one or more nearby computerized digital radio equipped devices external to the robot. The short-range bi-directional digital radio connection will typically have a maximum range of about 300 feet. In a preferred embodiment, this short-range wireless digital connection will use the 2.4 GHz band and digital protocols following the IEEE 802.11, 802.15, or other digital communications protocol. By employing the proper set of external short-range digital radio devices capable of interfacing with the robot (such as sensors, mechanical actuators, appliances, and the like), a remote user on the internet may direct the robot to move within range of the external devices, discover their functionality, and send and receive commands and data to the external devices through the CGI interface on the robot's onboard web server.